SUPPLEMENTAL REPORT

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND IRRIGATION WATER FORECASTS
FOR OREGON

May 1, 1945

by

Division of Irrigation, Soil Conservation Service
United States Department of Agriculture

and

Oregon Agricultural Experiment Station

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Oregon's 1945 water supply prospect has shown only slight change during the past month and this report, although presenting slight revisions in forecasts, is merely supplementary to that issued on April 1, 1945.

Mountain snow cover at low elevations has now largely disappeared. The higher elevations still retain a fair snow pack with parts of the Cascade Range bearing a near normal snow crop.

Total water stored in all reservoirs is 2-1/2 percent greater than of similar date last year, but is 15 percent less than in 1943, and 11 percent less than in 1942.

Precipitation accumulated in Oregon valleys since October 1 averages 88 percent of normal as compared with 76 percent of normal for the same period in 1944.

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Note: Data included in this report were obtained by the agencies named above in cooperation with the Oregon State Engineer, U. S. Forest Service, National Park Service and other Federal, State and local organizations.

The following revised run-off forecasts are based on mountain snow cover and on the assumption that precipitation and temperature during the remaining run-off season will be approximately normal. Appreciable deviations from normal of temperature and/or precipitation, especially during May or June, will correspondingly modify these forecasts.

Area	Stream	Apr.-Sept., incl., Stream Flow Expectancy as of May 1, 1945		
		Acre Feet	As % of Avg. 1929-43	As % of Last Year
Northcentral	White River below Tygh Valley at Sta. 3613	76,000	56	87
Umatilla-Walla Walla	McKay Creek above McKay Reservoir (2213)	26,000	109	99
	S. Fk. Walla Walla River near Milton (214)	59,000	91 a	106
	Umatilla R. at Pendleton (223)	150,000	102	122
Northeastern	Grande Ronde River near LaGrande (1816)	125,000	83	134
	Hurricane Cr. nr. Joseph (1814)	33,000	86	101
	Imnaha River at Imnaha (172)	175,000	71	92
	Lostine R. near Lostine (1810)	96,000	90	107
	Powder River at Salisbury (152)	40,000	80	150
	Wallowa R., E. Fk. (1822+1823)	8,000	86	94
Eastern	Malheur River, Middle Fork, near Drewsey (1320)	55,000	96	202
	Malheur River, North Fork, at Beulah (139)	45,000	96	b
Harney Basin	Silvies R. near Burns (966)	47,000	76	209
Central	Crescent Lake Net Inflow	5,500	50	b
Southcentral	Chewaucan R. nr. Paisley (924)	40,000 c	76	119
	Deep Creek abv. Adel (9127)	35,000 c	70 d	87
Klamath Basin	Clear Lake Reservoir Net Inflow	112,000 e	101 f	205
	Gerber Reservoir Net Inflow	50,000 e	95 f	238
	Upper Klamath Lake Net Inflow	392,000	98	99
Southern	Fourmile Lake Net Inflow	6,100	91 g	b
	Rogue River, N. Fk., above Prospect (722)	250,000	91	105
Willamette Valley	Willamette R., Mid Fk., at Eula (512)	650,000	86	117

a - 1932-43
b - Not available
c - April-June, incl., rather than April-Sept.
d - 1930-43 average
e - Stream year 1944-45
f - 1905-43 average
g - Excl. 1931

STATUS OF RESERVOIR STORAGE AS OF MAY FIRST

In the following tabulation, water storage in acre feet in important Oregon reservoirs as of about May 1, 1945, is compared with storage as of approximately the same date in 1944, 1943, 1942, and with 10 yr. average, 1935-44.

Storage Reservoir	Stream Basin	Capacity Acre Ft.	Acre Feet in Storage: About 5-1-45	About 5-1-44	About 5-1-43	About 5-1-42	10-yr. Avg. 1935-44
Agency Valley	Malheur	60,000	60,200	52,980	58,440	62,300	54,253[c]
Clear Lake	Lost River	440,240[b]	293,340[b]	302,940[b]	383,931[b]	315,860[b]	236,580[b]
Cold Springs	Umatilla	50,000	47,000	49,800	49,250	49,700	46,710
Cottage Grove	Willamette	30,000[b]	28,300[b]	31,940[b]	33,320[b]	-	-
Cottonwood	Goose Lake	4,160	3,685	No report	No report	No report	3,064[e]
Crane Prairie	Deschutes	50,000	35,130	49,850	48,860	30,780	39,217
Crescent Lake	Deschutes	80,000	35,950	53,540	40,050	23,000[a]	36,419
Drew Creek	Goose Lake	62,500	60,000	49,560	No report	No report	56,936[g]
Emigrant Gap	Rogue	8,200	8,220	8,342	8,318	8,248	8,159
Fern Ridge	Willamette	95,000[b]	89,600[b]	50,470[b]	104,000[b]	54,890[b]	-
Fish Lake	Rogue	7,720	4,555	7,070	7,328	4,182[a]	5,553
Fourmile Lake	Klamath	14,000[d]	9,290	12,080[a]	11,850	5,567	9,883[h]
Gerber	Klamath	94,000[b]	70,340[b]	57,236[b]	74,690[b]	65,210[b]	67,112[b]
Hyatt Prairie	Klamath	16,000[d]	6,330	9,567	15,430[a]	10,380	9,908
McKay	Umatilla	74,000	71,300	71,300	71,820	71,770	59,673
Ochoco	Crooked	46,000	17,760	26,240	46,520	36,470	27,919
Owyhee	Owyhee	715,000[b]	715,000[b]	603,710[b]	715,000[b]	716,000[b]	696,091[b]
Thief Valley	Powder	17,400	17,400	17,400	17,400	17,400	17,400[i]
Unity	Burnt	25,260	19,750	18,340	25,120	24,310	22,486
Upper Klamath	Klamath	583,900[f]	383,440[f]	444,600[f]	544,800[f]	550,200[f]	524,460[f]
Wallowa Lake	Wallowa	40,920	13,670	33,760	31,390	39,430	25,210
Warmsprings	Malheur	190,000	120,300	150,200	184,400	192,000	144,975
Wickiup	Deschutes	180,000	63,800	17,350	18,710	-	-

a - Estimated
b - Available for use
c - Excl. 1935
d - By ditch to Rogue River side
e - Excl. 1942, '43, '44
f - Based on gage zero elevation 4135.0
g - Excl. 1942, '43
h - Excl. 1936, '37
i - 1941-44

STATUS OF VALLEY PRECIPITATION AS OF OCTOBER 1 TO DATE

Month	Oct.		Nov.		Dec.		Jan.		Feb.		Mar.		Apr.		Period	
Section	P	D	P	D	P	D	P	D	P	D	P	D	P	D	P	D
S. E.	0.29	-0.39	1.80	+0.92	1.00	-0.17	1.08	-0.23	1.40	+0.35	1.45	+0.56	0.1	-0.7	7.12	-0.22
S. C.	0.86	-0.11	2.76	+0.95	1.20	-0.92	1.06	-0.76	2.42	+0.83	1.24	0	0.4	-0.8	9.94	-0.01
N. C.	0.72	-0.04	1.45	-0.10	0.91	-0.52	1.18	-0.25	1.70	+0.36	0.73	-0.24	0.5	-0.4	7.19	-1.19
Col. Riv.	0.44	-0.56	1.56	-0.12	0.72	-0.95	1.51	-0.12	1.67	+0.32	1.48	+0.35	1.0	0	8.38	-1.08
Wal. Mts.	0.74	-0.70	1.54	-0.31	0.52	-0.86	1.91	-0.20	1.92	-0.25	1.76	+0.15	1.3	-0.2	9.69	-2.37
Blue Mts.	0.61	-0.76	1.66	-0.08	0.87	-0.96	2.17	-0.17	2.54	+0.53	2.04	+0.20	1.2	-0.1	11.09	-1.34
Southern	1.69	-0.32	3.42	-0.04	1.28	-2.56	2.33	-1.21	4.96	+1.99	2.82	+0.54	1.0	-0.8	17.50	-2.40
Willamette	1.59	-2.57	5.90	-1.99	3.12	-5.38	6.74	-0.93	8.46	+2.07	8.37	+2.65	4.1	+0.3	38.28	-5.85
Area	0.87	-0.68	2.51	-0.10	1.20	-1.54	2.25	-0.48	3.13	+0.78	2.49	+0.53	1.2	-0.3	13.65	-1.81

P - Inches precipitation. D - Inches departure from normal.

S. E. - Southeastern Oregon range lands, Harney and Malheur Counties.
S. C. - Southcentral Oregon range lands, Lake County and Klamath County, except the Cascade Mountains.
N.C. - Northcentral Oregon wheat and range lands, Crook, Deschutes, Jefferson, Wheeler and part of Grant Counties.
Col. Riv. - Columbia River area, wheat and range lands, Gilliam, Morrow, Sherman, Wasco and part of Umatilla Counties.
Wal. Mts. - Wallowa Mountain area, forest and range lands, Wallowa and part of Baker County.
Blue Mts. - The Blue Mountain forest and range area, Union and parts of Baker, Grant and Umatilla Counties.
Southern - Southern Oregon irrigated section, Jackson and Josephine Counties.
Willamette - Parts of Polk, Benton, Yamhill, Washington, Lane and all of Linn, Marion, Clackamas and Multnomah Counties.

Note: Data for the last month shown above are preliminary, as they are based on a few stations only. Data for earlier months have been corrected to include all the stations in Climatological Data for the area.

TRIBUTARY BASINS (Primary & Secondary & Snow Courses)	LOCATION Oregon Number	Sec.	Twp.	Range	Elev.	SNOW COVER MEASUREMENTS About May 1, 1945 Date	Avg. Snow Depth (In.)	Avg. Water Depth (In.)	Average Water Depth (Inches) One Month Ago (4-1-45)	One Year Ago (5-1-44)	Two Years Ago (5-1-43)	Avg. for past yrs. of record	Yrs. of record
LOWER COLUMBIA DRAINAGE													
SANDY RIVER													
Phlox Point-Mt. Hood	452	6	3S	9E	5600	4-30	128.4	58.8	47.1	43.3	-	43.8	6
Still Creek	451	25	3S	8½E	3700	4-27	35.0	16.0	18.3	10.5	-	7.1	5
WEST COAST DRAINAGE													
ROGUE RIVER & KLAMATH LAKE BASINS													
Park Headquarters	838	8	31S	6E	6450	4-27	112.8	50.2	49.2	-	63.5	47.5	3
Annie Spring	831	19	31S	6E	6018	4-27	84.5	37.2	36.1	29.2	45.5	34.3	6